Application No.: 10/510,213

Page 2

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Original): An X-ray tube adjusting apparatus which remotely adjusts an X-ray

tube, comprising:

storage means which stores, beforehand, an initial image of a subject to be imaged

engraved with a given pattern, said initial image having been imaged by an X-ray inspection

apparatus having said X-ray tube with a focal diameter of an electron beam at a target of said X-

ray tube adjusted so as to be a predetermined value and an imaging device;

acquisition means which acquires a test image of said subject to be imaged that is imaged

at a time said X-ray inspection apparatus adjusts the focal diameter via a telecommunications

line; and

presentation means which presents said initial image stored in said storage means and

said test image acquired by said acquisition means in a comparable manner.

Claim 2 (Original): The X-ray tube adjusting apparatus according to Claim 1, including

operation means that manipulates a focus lens, which adjusts a beam diameter of the electron

beam in said X-ray tube, via a telecommunications line.

Claim 3 (Original): An X-ray tube adjusting system which remotely adjusts an X-ray tube, comprising:

an X-ray inspection apparatus having an X-ray tube and an imaging device; and an X-ray tube adjusting apparatus having

storage means which stores, beforehand, an initial image of a subject to be imaged engraved with a given pattern, said initial image having been imaged by said X-ray inspection apparatus with a focal diameter of an electron beam at a target of said X-ray tube adjusted so as to be a predetermined value,

acquisition means which acquires a test image of said subject to be imaged that is imaged at a time said X-ray inspection apparatus adjusts the focal diameter via a telecommunications line, and

presentation means which presents said initial image stored in said storage means and said test image acquired by said acquisition means in a comparable manner,

and characterized in that said X-ray inspection apparatus and said X-ray tube adjusting apparatus are connected together via a telecommunications line.

Claim 4 (Original): An X-ray tube adjusting method for remotely adjusting an X-ray tube,

wherein an initial image of a subject to be imaged engraved with a given pattern is stored in storage means beforehand, said initial image having been imaged by an X-ray inspection apparatus having said X-ray tube with a focal diameter of an electron beam at a target of said X-ray tube adjusted so as to be a predetermined value and an imaging device, and comprising:

Application No.: 10/510,213

Page 4

an acquisition step at which acquisition means acquires a test image of said subject to be

imaged that is imaged at a time said X-ray inspection apparatus adjusts the focal diameter; and

a presentation step at which presentation means presents said initial image stored in said

storage means and said test image acquired by said acquisition means in a comparable manner.

Claim 5 (Original): The X-ray tube adjusting method according to Claim 4, comprising

an operation step at which operation means manipulates a focus lens, which adjusts a beam

diameter of the electron beam in said X-ray tube, via the telecommunications line.

Claim 6 (Original): An X-ray tube adjusting method,

wherein an initial image of a subject to be imaged engraved with a given pattern is stored

in storage means beforehand in association with identification information of said X-ray tube,

said initial image having been imaged by an X-ray inspection apparatus having said X-ray tube

with a focal diameter of an electron beam at a target of said X-ray tube adjusted so as to be a

predetermined value and an imaging device, and comprising:

an imaging step at which said X-ray inspection apparatus images a test image of said

subject to be imaged at a time parts of said X-ray tube are replaced; and

a presentation step at which the initial image associated with the identification

information of said X-ray tube is acquired from said storage means and presented in such a

manner as to be comparable with said test image.

Claim 7 (Original): The X-ray tube adjusting method according to Claim 6, further comprising:

an alignment adjusting step at which a position of a beam axis of the electron beam in said X-ray tube is adjusted;

a set step at which, following said alignment adjusting step and prior to said imaging step, said subject to be imaged is placed at a same position as that when said initial image was imaged; and

a focus adjusting step at which referring to the images presented at said presentation step, a focus lens of said X-ray tube is adjusted in such a way that a focal diameter of the electron beam at a target of said X-ray tube becomes said desired state.

Claim 8 (New): The X-ray tube adjusting apparatus according to Claim 1, wherein the presentation means presents the initial image at the same time as it presents the test image.

Claim 9 (New): The X-ray tube adjusting system according to Claim 3, wherein the presentation means presents the initial image at the same time as it presents the test image.

Claim 10 (New): The X-ray tube adjusting method according to Claim 4, wherein the presentation means presents the initial image at the same time as it presents the test image.

Application No.: 10/510,213

Page 6

Claim 11 (New): The X-ray tube adjusting method according to Claim 6, wherein the

presentation step involves the presentation of the initial image at the same time as it presents the

test image.

Claim 12 (New): The X-ray tube adjusting apparatus according to Claim 1, wherein the

subject to be imaged is a slit plate.

Claim 13 (New): The X-ray tube adjusting system according to Claim 3, wherein the

subject to be imaged is a slit plate.

Claim 14 (New): The X-ray tube adjusting method according to Claim 4, wherein the

subject to be imaged is a slit plate.

Claim 15 (New): The X-ray tube adjusting method according to Claim 6, wherein the

subject to be imaged is a slit plate.

Claim 16 (New): The X-ray tube adjusting apparatus according to Claim 1, wherein the

presentation means presents a luminance corresponding to the pattern of the subject to be

imaged.

Application No.: 10/510,213

Page 7

Claim 17 (New): The X-ray tube adjusting system according to Claim 3, wherein the

presentation means presents a luminance corresponding to the pattern of the subject to be

imaged.

Claim 18 (New): The X-ray tube adjusting method according to Claim 4, wherein the

presentation means presents a luminance corresponding to the pattern of the subject to be

imaged.

Claim 19 (New): The X-ray tube adjusting method according to Claim 6, wherein the

presentation step involves the presentation of a luminance corresponding to the pattern of the

subject to be imaged.

Claim 20 (New): The X-ray tube adjusting apparatus according to Claim 12, wherein the

presentation means presents a luminance corresponding to the lines of the slit plate.

Claim 21 (New): The X-ray tube adjusting system according to Claim 13, wherein the

presentation means presents a luminance corresponding to the lines of the slit plate

Claim 22 (New): The X-ray tube adjusting method according to Claim 14, wherein the

presentation means presents a luminance corresponding to the lines of the slit plate.

Application No.: 10/510,213

Page 8

Claim 23 (New): The X-ray tube adjusting method according to Claim 15, wherein the presentation step involves the presentation of a luminance corresponding to the lines of the slit plate.